Ask a Practice Advisor

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Abbreviations Can Cause Medication Errors

Ensuring safe and effective administration of medications to clients is an important component of nursing care. Quality practice settings provide policies to facilitate consistent medication administration practices. The five rights of medication administration have been used by RNs to ensure that the right drug is administered to the right person in the right dosage at the right time and via the right route (SRNA, 2003). Despite the safeguards at all levels to ensure these five rights, medication errors may arise due to dangerous abbreviations that are used.

The Institute for Safe Medication Practices (ISMP) has published a list of some of the most error-prone or dangerous abbreviations and dose designations. Prohibited abbreviations have been identified as part of JCAHO's National Patient Safety Goals for 2004. (Downloaded, March 22, 2004 from: http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/psn/transcript.cfm?show =25#6)

Examples of potential errors:

- "U" and "IU" - The "U" can easily be mistaken as the number "0", particularly when the "U" is written too closely after the number. This can lead to tenfold overdoses. And "IU" can be mistaken for "IV" or the number "10". So instead of using "U" and "IU", use the terms "unit" and "international unit".
- "q.d" - The "q.d." means every day, and "q.o.d.", means every other day. "q.d." can be mistaken as "q.i.d.", if the period after the "q" or the tail of the "q" is misunderstood as an "i". And "q.o.d." can be mistaken for "q.d." or "q.i.d." if the "o" is poorly written. Instead, write out "daily" or "every other day".
- Possible confusion with dose designations that include decimal points. - A trailing zero after a decimal point can make a "1.0 mg" dose look like a 10 mg dose if the decimal point isn't seen. Similarly, ".5 mg" can look like "5 mg". So don't use trailing zeros for doses expressed in whole numbers and be sure to use a leading zero when the dose is less than a whole unit.
- MgSO4 or MSO4 or MS. - The abbreviations for magnesium sulfate (MgSO4) and morphine sulfate (MSO4 or MS), which can look similar or be misinterpreted. It is best to write out "magnesium sulfate" or "morphine sulfate".

(To download a complete list of error-prone abbreviations, symbols and dose designations, go to http://www.ismp.org/PDF/ ISMPAbbreviations.pdf)

References

Institute for Safe Medication Practices. (2003). ISMP list of error-prone abbreviations, symbols, and dose designations. ISMP Medication Safety Alert, 8(24), 3-4.

Institute for Safe Medication Practices. (2004). Downloaded, March 22, 2004 from http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/psn/transcript.cfm?show=25#6

Saskatchewan Registered Nurses Association. (2003). Guidelines for Medication Administration. Regina, SK: Author.